



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,044	07/10/2002	Akihiro Niki	2002-0329A	9566

513 7590 12/07/2004

WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

ROBERTSON, JEFFREY

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,044

Applicant(s)

NIKI ET AL.

Examiner

Jeffrey B. Robertson

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-13 and 15-26 is/are rejected.
- 7) ☒ Claim(s) 5-9 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 032602.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it is two paragraphs. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Gerkin et al. (U.S. Patent No. 3,935,132). For claim 18, in column 5, Example 2, Gerkin teaches producing sheet through molding the reaction product of a polyester, a polyether and a polyisocyanate. Since claim 18 is a product by process claim, it is not seen how the sheet of Gerkin is different then the sheet of claim 18. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-4, 10-13, 15, 16, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al. (JP 02-215821, See English Translation).

For claims 1, 3, 4, 12, and 13 on page 5 of the translation, the reference teaches the preparation of a thermoplastic elastomer containing a polyalkylene oxide adduct in an amount of 50-99.5 wt%, where the T_g of the elastomer is -30 to 80° C, and the molecular weight is from 300-1200, overlapping with the ranges set forth by applicant. On page 6, lines 6-16 of the translation, the reference teaches that the polyalkylene oxide is derived from ethylene oxide and ethylene glycol, which results in a carbon/oxygen ratio of 2.0. As a choice is required between ethylene oxide and propylene oxide and among the glycols, this rejection is made under 35 USC 103.

For claims 2, 10, and 11, in the paragraph bridging pages 5 and 6, the reference teaches polyisocyanates used to react with the polyalkylene oxide component including MDI.

For claim 12, although the reference does not specifically set forth the water absorption ratio or storage modulus of elasticity, the examiner's position is that these properties would be inherent properties of the elastomers produced in the reference. "[T]he PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. In re Fitzgerald, 619 F. 2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

For claims 15, 16, and 24, on page 4, lines 2-9, page 8, lines 8-14, the reference teaches that the elastomer is used in clothes and medical products.

8. Claims 17, 19-23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al. (JP 02-215821, See English Translation) as applied to claims 1 and 12 above, and further in view of Kobayashi et al. JP 10-017764 (See Machine Translation).

For claims 17, 19-23, 25, and 26, Yamaguchi teaches the limitations of claims 1 and 12 as detailed above. Yamaguchi fails to teach that the composition can be formed as a film and laminating a fabric on one side of the film.

In paragraphs [0002], [0003], [0029], and [0030], Kobayashi teaches that polyurethane compositions are formulated as films and are laminated on fibers and fabrics to impart waterproofing properties.

Yamaguchi and Kobayashi are analogous art in that they both come from the same field of endeavor, namely polyurethane compositions used for cloth applications. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the compositions of Yamaguchi in the methods of Kobayashi. The motivation would have been that Yamaguchi teaches that the thermoplastic compositions are used in similar applications as those set forth by Kobayashi. One of ordinary skill in the art would have turned to Kobayashi for specific instructions in methods applying the thermoplastic polyurethanes of Yamaguchi.

Allowable Subject Matter

9. Claims 5-9 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Yamaguchi, applied above, is the closest prior art. Yamaguchi does not teach or suggest the addition of a polyester component to the polyether components of claim 1.

Conclusion

10. JP 06-049169 is cited as an X reference on the international search report. However, this reference fails to teach or suggest the subject matter of the instant claims. Specifically, the Tg's of the polymer are above -20° C and for claim 18, there is no mention of a polyester component. See attached machine translation of this document.

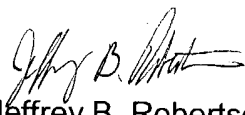
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Anderson et al. (U.S. Patent No. 5,441,808), Shustack (U.S. Patent No. 5,527,835), Slagel (U.S. Patent No. 5,811,506), and Slagel (U.S. Patent No. 6,258,917) are cited for general interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P Gulakowski can be reached on (571) 272-1302. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeffrey B. Robertson
Primary Examiner
Art Unit 1712

JBR